



## Material - UNS J12540

### Standard Specification for Alloy Steel Casting

Group - Ferrous Mild Steel Alloys

Sub Group - UNS J12540 Alloy Steel Casting

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.250 max.	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.600 max.		
Manganese	Mn %	0.700 max.		
Phosphorus	P %	0.035 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	0.400 - 0.700		
Molybdenum	Mo %	0.400 - 0.600		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	485 min.
-	-	-	Yield Strength in Mpa	275 min.
-	-	-	Elongation in %	22 min.
-	-	-	Reduction of Area in %	35 min.
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
12 MCh	GOST	Russia	Steel
L 17 HM	PN	Poland	Casting
STE 285	DIN	Germany	Tube
TS 15 CD 2-05	AFNOR NF	France	Tube
XF 400	AS	Australia	Flat
XF 500	AS	Australia	Flat
A356 5	ASTM	USA	Casting

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.